

ACADEMY

NEWSLETTER OF THE CALIFORNIA ACADEMY OF SCIENCES

HOME OF
STEINHART
AQUARIUM,
MORRISON
PLANETARIUM,
NATURAL
HISTORY
MUSEUM

AMBER

WINDOW TO THE PAST

February 15 through April 15

The most comprehensive exhibition of this remarkable material ever mounted, "Amber: Window to the Past" explores this "organic jewel" in a multifaceted presentation that brings together the worlds of nature and art. Prior to this exhibition, there has never been such a selection of amber pieces on view, and — due to the fragility of many of the works — it is unlikely that such a stunning assemblage will be displayed again. This 6,000-square-foot display in Wattis Hall has approximately 145 exquisitely preserved fossil specimens and 80 decorative objects carved from amber.



True scorpion,
Dominican amber

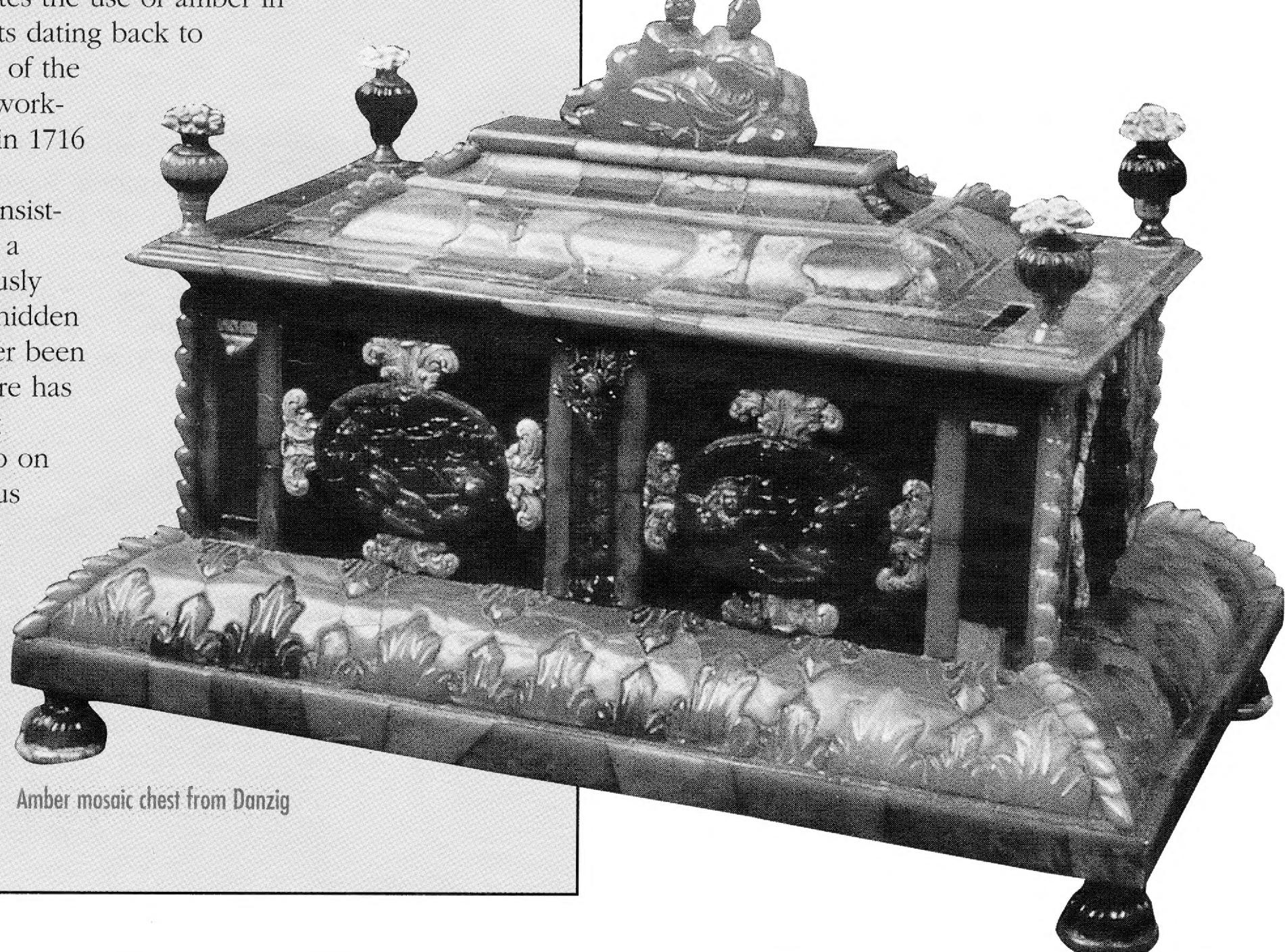
Amber in Nature

Selected for their beauty, significance, and rarity, many of the specimens displayed in this section of the exhibition are millions of years old and contain creatures frozen, with astounding fidelity, in acts of social and defensive behavior.

Highlights include an ancient tree frog — the largest of four frog specimens known to exist in amber — and a pair of craneflies preserved while mating. Visitors can compare fossilized DNA with that of modern insects, and learn how studies of ancient DNA have enabled scientists to refute outdated ideas about evolution. Amber pieces, containing fossilized specimens, are juxtaposed with a life-size diorama of an ancient Dominican amber forest complete with special lighting, frog sounds, insect noises and a running stream.

Amber in Art

Another section of the exhibit illuminates the use of amber in the decorative arts, from carved amulets dating back to 9,000 B.C., to the elaborate re-creation of the Amber Room. The pinnacle of amber workmanship, the Amber Room originated in 1716 as a gift from Prussian King Frederick William I to Czar Peter the Great. It consisted of 22 panels completely covered in a mosaic of more than 100,000 meticulously carved amber pieces. Dismantled and hidden by Nazis in 1942, the panels have never been recovered. A portion of this lost treasure has been re-created to yield an astonishing replica of one corner of the room. Also on display is a diverse selection of precious amber carvings, rich in gem-like tones of gold and red, including original objects from the Russian Czars' collection. An array of elaborately decorated chests, caskets, mosaics, game boards and sculptures from all over the world make this an exhibition cultural explorers won't want to miss.



Amber mosaic chest from Danzig

ACADEMY OF SCIENCES ENGAGES THE EXPERTISE OF BAY AREA PROFESSIONALS

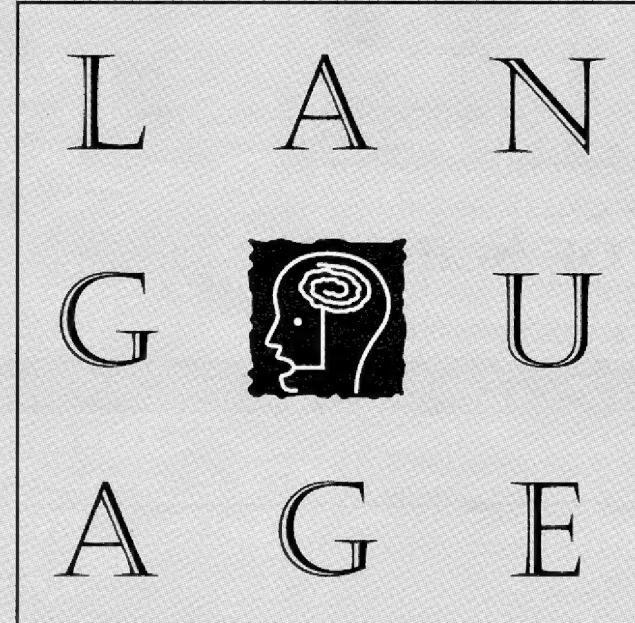
The support of the Academy Council — a very special group of volunteers who lend insight on a variety of issues — has been so valuable that Executive Director Dr. Evelyn E. Handler recently invited members to participate in other leadership committees.

Led by Chairman Hamilton W. Budge, the Academy Council members are talented people from a cross-section of occupations, interests and geographic areas of the Bay area. These generous volunteers share their perspectives regarding the Academy of Sciences' future, public perception, mission activities and financial support. Members are also ambassadors to the community as they represent the Academy's mission and programs throughout the Bay area.

Dr. Handler hopes to draw upon council members' personal and professional expertise for the Science Council, the Education and Exhibits Committee, the Friends Committee and special event host committees. MaryAnn Aronson, Betsy Dixon and Christine Hagenbuch were appointed to a steering committee to explore members' interests and make recommendations for future service.

The Academy of Sciences is very grateful for the Academy Council's current and future support.

The ORIGIN & Diversification of



The Third Annual Wattis Symposium

The ability of human beings to communicate information of great complexity to one another through speech is one of the hallmarks of our species. In this symposium, we have assembled a range of distinguished scientists from various disciplines to present the latest evidence on the origin, spread and diversification of language.

Language has given us the gift of amazing behavioral flexibility, and yet much remains to be learned about how our sophisticated linguistic skills were developed. As with many other key innovations in human evolution, the beginnings of language did not leave direct traces in the fossil record. Thus, the exploration of various kinds of indirect evidence is essential.

In recent years, theoretical insights and technological breakthroughs have permitted scholars to probe questions of language origins and diversification from new perspectives. The symposium will explore such topics as how language originated and the evolution of language.

Speakers for the symposium will include: Dr. Peter Marler of the University of California at Davis speaking on "Animal Communication and Human Language," and Lord Colin Renfrew of the University of Cambridge speaking on "Language and the Spread of Agriculture."

Early registration is strongly recommended as seating is limited. Please use order form for tickets. For a full symposium brochure with speakers and topics, please call (415) 750-7163.

*Sat., April 12 — 9 a.m. to 5:30 p.m.
A speakers' reception will follow at 5:30 p.m.
Cost: \$35 members/\$45 nonmembers*

 JUNIOR ACADEMY

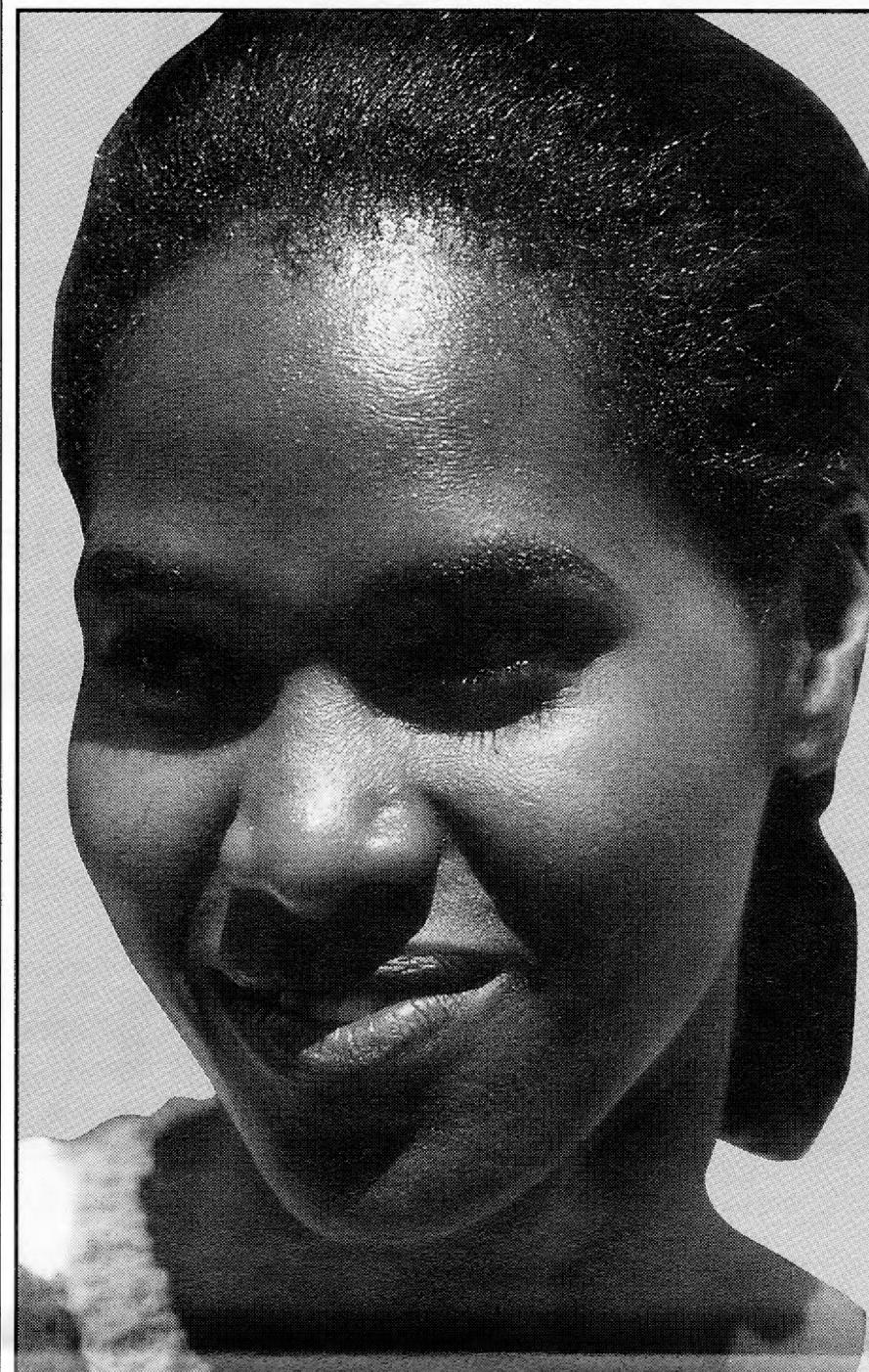
Sierra Cross-Country Ski & Winter Ecology Trip

What happens to the animals and plants in the High Sierra when snow covers the ground? Join instructors Michael Gillogly and Ginger Parish for a weekend at Bear Valley and Calaveras Big Trees State Park as we experience the splendor of giant sequoia trees, discover animal tracks and feel the hush of a serene, snow-covered woodland while cross-country skiing. We'll stay in a cozy cabin in the Arnold area. No previous ski experience necessary. Ski instruction, equipment, transportation, food and lodging included.

Fri., Feb. 7 at 6 p.m. to Sun., Feb. 9 at 7 p.m.
Ages 12-16: \$225

Ages 12-18, \$225

Our spring catalog is in the mail, filled with exciting Saturday workshops and field trips for kids 6-16 during February and March, as well as for the spring holiday March 31 through April 5. Please use the current education catalog to register and for other class listings, or sign up for the above class through the newsletter order form. Call (415) 750-7100 for more information.



William Conway

Conservation Compromise: to Live With W

One Planet

With Nairobi National Park from the city of Nairobi in I between wildlife and huma cern. The Academy of Scier come Dr. Helen Gichohi of Conservation Society (WCS) local communities like the 1 these conflicts.

Through her research, C. impact of human settlement and feeding of wildebeest, :

Dr. Helen Gichohi will bring to life the na



The Ancient Arms Race Among Mollusks

Dr. Geerat Vermeij, an evolutionary biologist and paleontologist with the University of California at Davis, is well-known for his theories about the ongoing ancient arms race among mollusks. When Vermeij, blind since the age of 3, runs his fingers across a shell and deftly examines its punctured armor, he recreates its history of previous encounters with predators. His findings show that mollusks have evolved more rugged armor while their predators have developed more vicious weaponry.

*Wed., Jan. 22 — 7:30 p.m.
\$6 members/\$10 nonmembers*

The Earliest *Australopithecus*

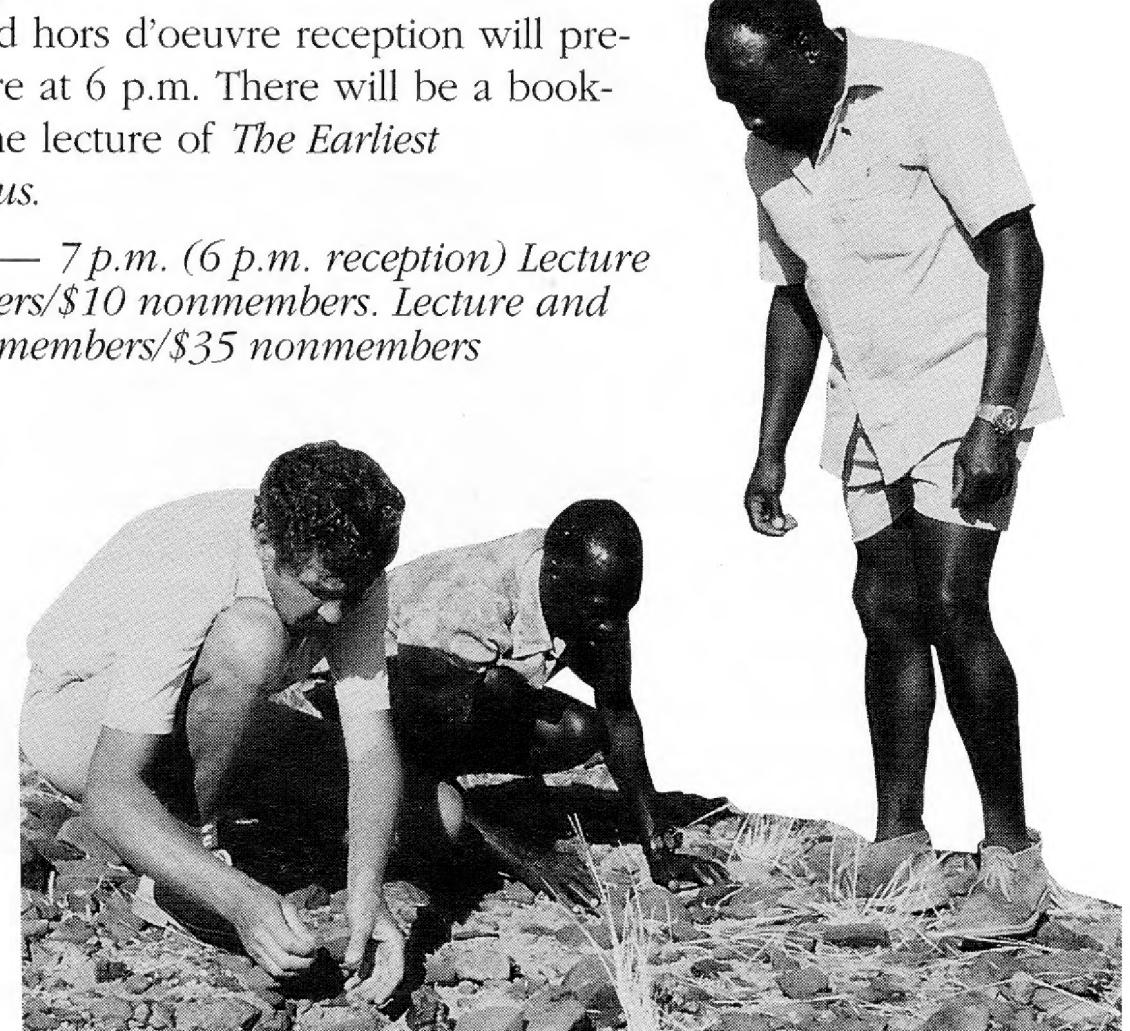
Widely recognized as being closely related to humans, the *Australopithecus* species is often considered an important link in the evolution of African apes and *Homo sapiens*. Although *Australopithecus* had the uniquely hominid form of striding bipedal locomotion, their behavior most likely resembled African apes more than humans.

Recent expeditions by the National Museums of Kenya have discovered fossils of the earliest *Australopithecus* from 3.9 to 4.2 million years old. *Australopithecus* underwent a minor adaptive radiation, with some having enormous jaws and teeth in strange-looking skulls and others being less derived from the ancestral state.

Dr. Alan Walker, professor of anthropology and biology at Pennsylvania State University, will discuss the National Museums of Kenya's recent findings. These findings are helping anthropologists to formulate ideas about the sequence of anatomical and behavioral changes that have occurred in our own lineage since the last common ancestor with African apes.

A wine and hors d'oeuvre reception will precede the lecture at 6 p.m. There will be a book-signing after the lecture of *The Earliest Australopithecus*.

*Thur., Feb. 20— 7 p.m. (6 p.m. reception) Lecture
only \$6 members/\$10 nonmembers. Lecture and
reception \$30 members/\$35 nonmembers*



Kamoya, Nzube and Dr. Walker at the Black Skull Site.

Electronic Database of Fishes Published

Dr. Bill Eschmeyer, senior curator of ichthyology, and his staff have recently published an Internet version of *A Catalog of the Species of Fishes* (the printed publication will follow). This comprehensive database contains over 53,000 described species and subspecies of fishes which — along with a similar database of fish genera and literature — involved 10 years of research and almost \$500,000 in National Science Foundation funding.

This catalog is the first treatment of all fishes since the early 1800s. About 200–300 new species are described each year. By providing accurate taxonomic information, these databases are an invaluable resource for ichthyologists and for others who address issues of conservation, management, fisheries and resource planning.

As a result of his expertise in nomenclature, Eschmeyer has recently been elected a commissioner of the International Commission on Zoological Nomenclature, the body that oversees and interprets the rules that all zoologists follow in naming and using scientific names.

To learn more about the database, visit the Academy of Sciences' web page at <http://www.calacademy.org>.



Susan Middleton
Dr. William Eschmeyer's catalog of fishes is now available on the Internet.

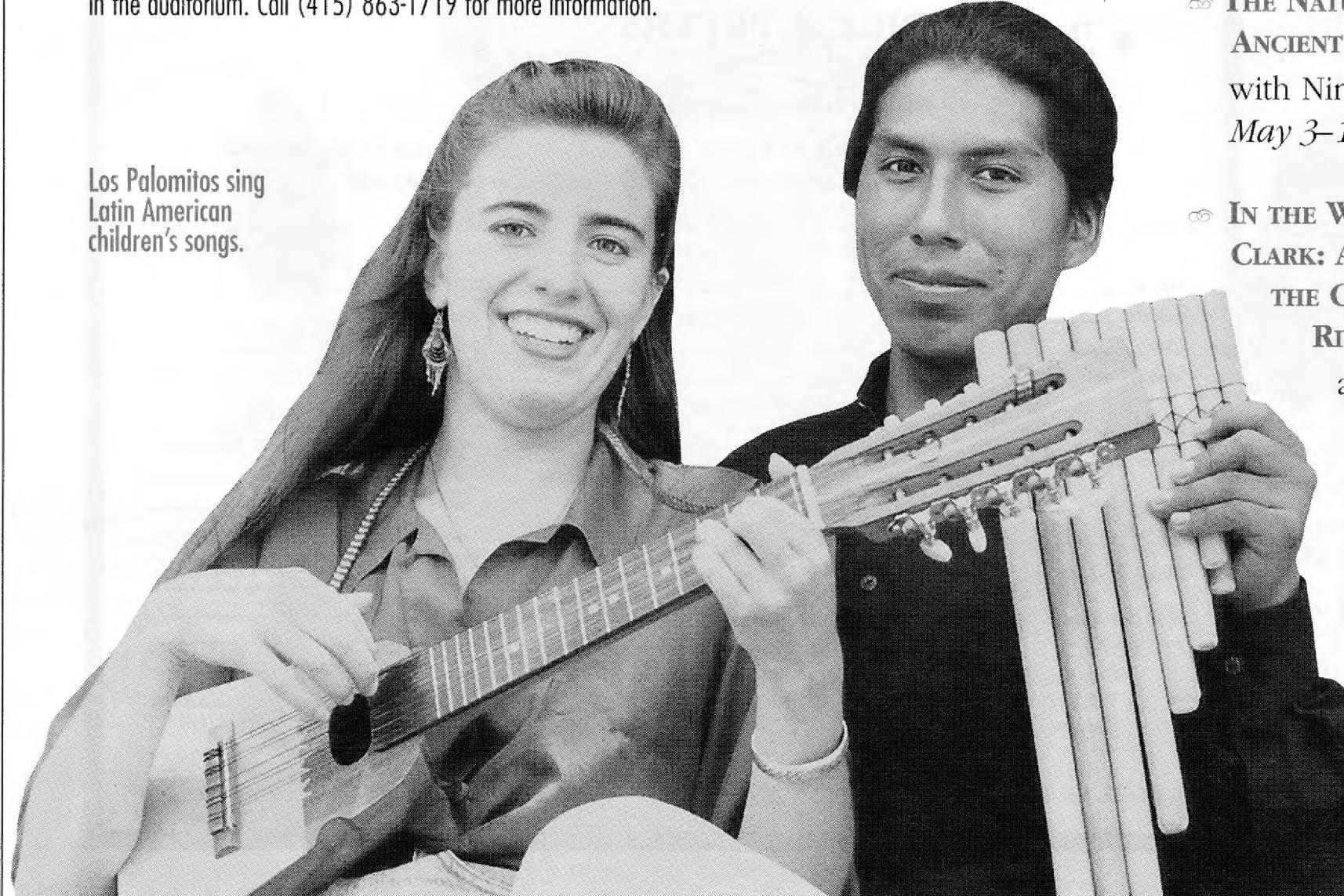
Los Palomitos

Travel to Central and South America with Los Palomitos in this bilingual program filled with folk, popular and original children's songs. Lydia and Hector accompany their singing with typical instruments from different regions of Latin America such as the guitar, the Venezuelan *cuatro*, the Andean *zamponas* and *kenas*, the Bolivian *charango* and the Argentinean *bombo*.

Sun., Jan. 19 — 1 p.m. to 2 p.m.

This one-hour family series by Young Audiences is free after general admission through a grant from the San Francisco Grants for the Arts and is presented in the auditorium. Call (415) 863-1719 for more information.

Los Palomitos sing Latin American children's songs.



From Topaz to Tombstones: The Geology of Gems & Ornamental Stones

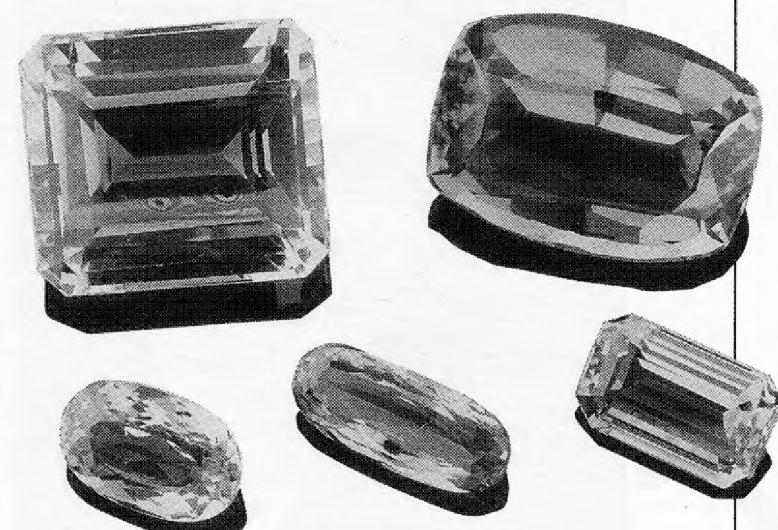
The minerals, rocks and organic materials used throughout history as ornaments and decorations come from a wide variety of natural sources. Explore the geologic origins of many of these materials with the Academy's Jean DeMouthe.

By explaining the formation process of sedimentary, igneous and metamorphic rocks, you'll see how the chemistry and structure of each substance are influenced by where and how it forms. Crystals, veins and lumps of minerals and rocks will be contrasted with finished gemstones and carvings to show the relationships between the shape, size and properties of the raw materials from which they were made. Organic materials that have a geologic origin, such as amber and jet, also will be discussed.

DeMouthe has been a geologist with the Academy of Sciences for over 23 years. As a senior collections manager, she cares for the Academy's large fossil, diatom and mineral collections. She also works as a consulting geologist and is currently acting county geologist for San Mateo County.

Wed., Jan. 8 — 2 p.m. & 7:30 p.m.

This program is a benefit of membership. Please present your membership card both at both the front entrance and the auditorium. Member's guest passes can be purchased for \$10 each for adults and \$5 for children. Please note: only the main entrance will be open for the members' lectures. Call (415) 750-7111 for more information.



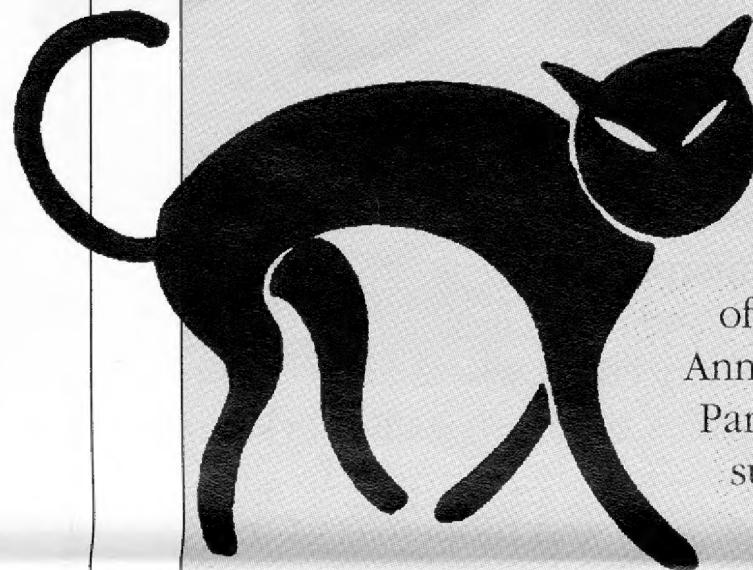
Topaz gemstones, from the Academy's collection.

The 1997 Academy Travel Program

- ☞ THE GALAPAGOS ISLANDS AND ANDEAN HIGHLANDS
aboard the *Isabella II*, with Terry Gosliner
Feb. 21 to March 5
- ☞ TRINIDAD, TOBAGO AND VENEZUELA
Land exploration, with Frank Almeda
March 1–15
- ☞ THE NATURAL, CULTURAL AND ANCIENT HISTORIES OF CHINA
with Nina Jablonski
May 3–17
- ☞ IN THE WAKE OF LEWIS AND CLARK: A VOYAGE ALONG THE COLUMBIA AND SNAKE RIVERS
aboard the *MV Sea Lion*, with Judy Prokupek
May 2–8
- ☞ SOUTHEAST ALASKA: LODGE-BASED KAYAKING
with Joe Brennan
July 6–13
- ☞ CANADA'S MARITIME PROVINCES, THE BAY OF FUNDY AND COASTAL MAINE
aboard the *MV Nantucket Clipper*, with Dave Kavanaugh
Aug. 30 to Sept. 13
- ☞ TURKEY: THE TURQUOISE COAST AND LAND EXPLORATION
with Sam Taylor
September or October
- ☞ A WILDLIFE TOUR OF INDIA and optional extension to Nepal, with Loren Behr
Nov. 7–22
- ☞ THE NATURAL TREASURES OF THE LOWER CARIBBEAN & ORINOCO RIVER
a holiday cruise aboard the *MV Yorktown Clipper*
Dec. 22 to Jan. 2

For information and itineraries on these tours, please call the Academy travel office at (415) 750-7348.

Halloween Bash with Dinosaurs and Scientists



"Jumpin' Jurassic! It's Halloween!" the Academy of Sciences' Fifth Annual Halloween Party, was a huge success. Over 450 adults and children attended

the frighteningly festive event, which took place in the Academy's recent exhibition, "The Dinosaurs of Jurassic Park."

Meat-eaters and vegetarians alike were delirious over the delectable buffet prepared by McCall Associates, which was accompanied by a Dixieland trio. Children made dinosaur castings, wore dinosaur hats, created ammonite rubbings, dug for dinosaur bones, and had fun with dinosaur tatoos!

Academy scientists dug out their oldest and scariest specimens — alive and dead! There were glow-in-the-dark fish and scorpions, fossils of trilobites and ammonites, primitive plant species, and bird and reptile displays illustrating their evolutionary link.

Many thanks to the members of the Halloween Party Host Committee for helping make this year's party a ghoulishly great event. Mark your calendars now for the next Halloween party on Fri., Oct. 24, 1997.

Other upcoming events featuring Academy scientists and specimens from the research collections are Curators' Circle Reception (March 18) and Members Open House (May 14).

Host committee members Randi Fisher (left) and Betsy Dixon enjoy the annual Halloween party with their children.

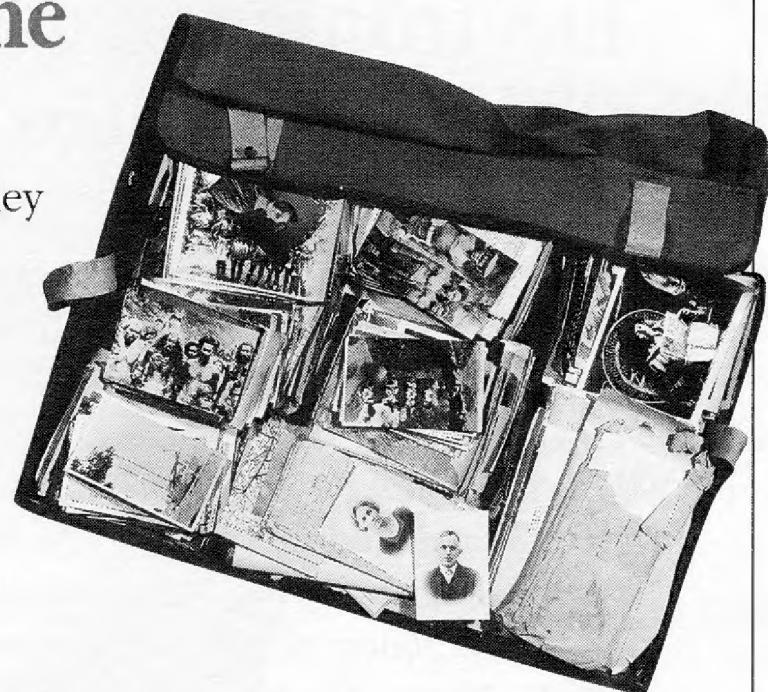


Dong Jih

Historic Treasures of the Academy's Archives

After a brief introduction, archivists Anne Malley and Beth Ryan will show you the academy's history through books, diaries, documents, photograph albums and other items normally not available to the public.

Wed., Jan. 8 — 7 p.m. to 9 p.m.
Cost: \$12 members/\$15 nonmembers



Illustrating Insects in Gouache & Prismacolor

Explore the exquisite beauty and color of the insect world. Working with instructor Carolynne Griffin, you'll use gouache and prismacolor on various papers. The class offers beginner and advanced students infinite possibilities to develop skills in texture, pattern and color.

Jan. 13 to Feb. 3 (4 Mon.) — 7 p.m. to 10 p.m.
Cost: \$95 members/\$105 nonmembers. (Does not include materials)

To register and for more information on these and other classes, contact the adult and family education program at (415) 750-7100.

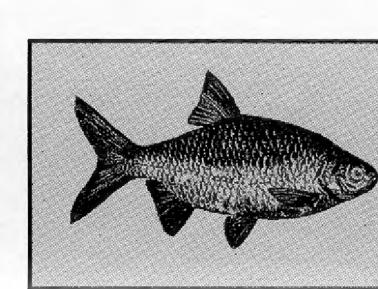
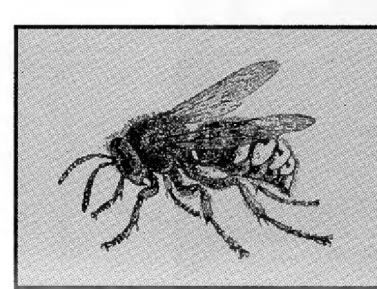
City Arts & Lectures, Inc.

presents

CALIFORNIA ACADEMY OF SCIENCES Conversations at the Herbst Theatre

1997

All Programs at 8PM



● Wednesday January 29

TONY HILLERMAN
Novelist and Essayist
Talking God; Sacred Clowns; The Fallen Man
In conversation with Joe Gores

● Monday February 10

DR. ANDREW WEIL
Natural and Preventative Medicine Physician
Spontaneous Healing
In conversation with Dr. Philip Zimbardo

● Monday February 17

PETER MATTHIESSEN
Writer and Explorer
The Snow Leopard; At Play in the Fields of the Lord
"On the Fate of Tigers"

● Thursday February 20

DR. SYLVIA EARLE
Oceanographer & Scientist
Sea Change—A Message of the Oceans

● Thursday February 27

TIM CAHILL
Travel Writer, Founding Editor, *Outside Magazine*
Jaguars Ripped My Flesh; Remote Journeys Oddly Rendered
In conversation with Roy Eisenhardt

● Monday March 17

RICHARD DAWKINS
Zoologist, Darwinist
The Blind Watchmaker; Climbing Mount Improbable
In conversation with Michael Krasny

● Monday May 5

FRANK J. SULLOWAY
Science Historian
Born to Rebel: Birth Order, Family Dynamics, and Revolutionary Genius
In conversation with Dr. Philip Zimbardo

● Thursday May 15

DR. C.J. PETERS
Virologist, Author
Virus Hunter
In conversation with Dr. Paul Volberding

This series is made possible by a grant from the Richard & Rhoda Goldman Fund
For Ticket Information Please Call City Box Office at (415) 392-4400

TICKET ORDER FORM

Subscription orders will be given priority attention.

| | |
|--|-----------------------|
| Name _____ | Daytime Phone _____ |
| Address _____ | Home Phone _____ |
| City _____ | State _____ Zip _____ |
| MasterCard/Visa/American Express # _____ Exp. Date _____ | |

SERIES TICKETS:

Please send me _____ series tickets at \$104 each.

C.A.S. MEMBERS SERIES TICKETS:

Please send me _____ series tickets at \$84 each.

Mail check (payable to City Box Office) or credit card number with a self-addressed and stamped envelope to:

City Box Office
153 Kearny Street, Suite 402
San Francisco, CA 94108

For further information call (415) 392-4400

INDIVIDUAL TICKETS

| | Regular Price | C.A.S. Members |
|---|---------------|----------------|
| Hillerman | \$16 | \$12 |
| Weil | \$16 | \$12 |
| Matthiessen | \$16 | \$12 |
| Earle | \$16 | \$12 |
| Cahill | \$16 | \$12 |
| Dawkins | \$16 | \$12 |
| Sulloway | \$16 | \$12 |
| Peters | \$16 | \$12 |
| Tickets | \$ | |
| Mail Order Handling Charge (Add \$1 Per Ticket (one season ticket = one ticket) | \$ | |
| TOTAL ENCLOSED | \$ | |

Wildlife Conservation Series Lecture

Through Learning Wildlife to Share

stone's throw away Kenya, conflicts are a major concern. The Wildlife who works with Maasai to resolve

Gichohi studies the on migration patterns of elephants and

the wonders of the vast plains of East Africa.

scores of other magnificent African animals. By bargaining with farmers, ranchers and government officials, she has defined a corridor through which wildlife can travel during their primordial seasonal movements. And, as the director of the African Conservation Center in Kenya, Gichohi trains local biologists and teaches local people how to co-exist with these animals.

There will be a special cocktail reception at 6:30 p.m. giving you the chance to meet personally with Gichohi. This lecture, part of the Wildlife Talks Series, is co-sponsored by the Academy of Sciences and the WCS.

*Tue., Jan. 28 — 7:30 p.m. (6:30 p.m. reception)
Cost: \$6 members/\$10 nonmembers
Reception and Lecture: \$36 members/\$45 non-members*

The Wildlife Talks Series continues with Drs. Kinnaird and O'Brien on "Saving Sumatra," April 8; and Dr. Carr III on "Networking With Nations," Jun. 10. Use newsletter order form for tickets. Call (415) 750-7128 for more information.

LECTURES

The "Compleat" Cockroach

*I*t is time to view the cockroach in a new light. "Instead of an accursed nuisance, we are seeing a wizened old soul — one whose ancestors were around when the continents formed, who witnessed the emergence and disappearance of the dinosaurs, and who watched an agile, chimpanzee-like primate become *Homo sapiens*," says David George Gordon. A fitting tribute to one of nature's most enduring triumphs, Gordon has written a comprehensive guide to the most despised (and least understood) creature on Earth.

In this lecture, Gordon will highlight a wacky compendium of cockroach fact and fiction. Fun facts (like the cockroach has three times as much protein as chicken meat), quirky mating rituals and more about this ancient creature will be discussed.

Gordon, a freelance science editor and writer, has served as a staff biologist at the Point Defiance Zoo and Aquarium in Tacoma, WA and the Shedd Aquarium in Chicago. He also has served as an exhibit consultant for several west coast organizations.

There will be a book-signing of *The Compleat Cockroach* after the lecture.

*Tue., Feb. 25 — 7:30 p.m.
\$6 members/\$10 nonmembers*

Discover the natural world through Special Lectures, which feature authors and experts speaking on a variety of natural history topics. Please use newsletter order form for tickets, or call (415) 750-7128 for more information.



David George Gordon gives tribute to one of nature's most enduring triumphs, the 340-million-year-old cockroach.

ASTRONOMY LECTURE

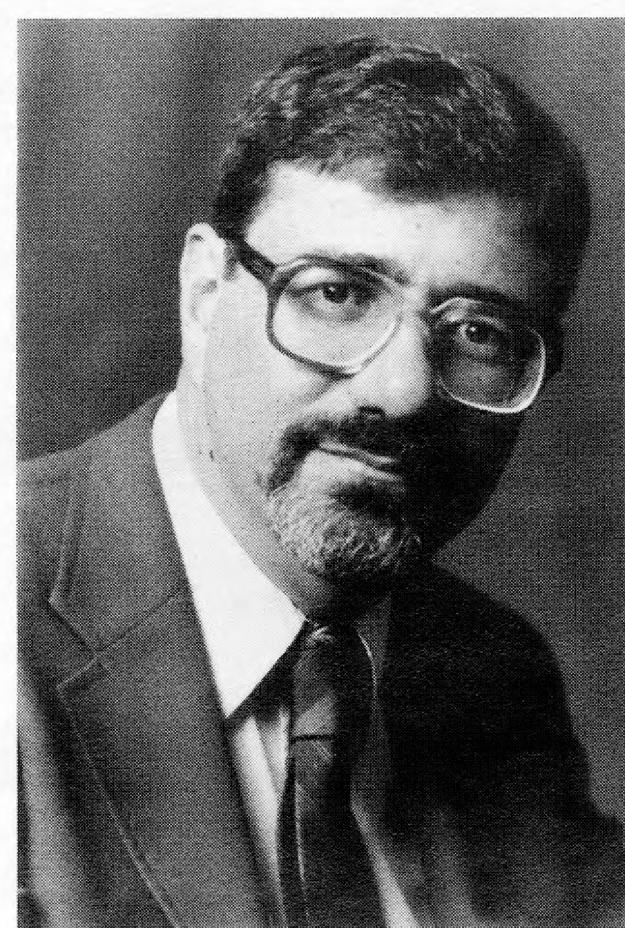
Life on Mars

*W*ith the help of new technological advances, recent evidence strongly suggests that primitive life may have existed on Mars more than 3.6 billion years ago. A team of scientists discovered the first organic molecules believed to be of Martian origin when re-analyzing an ancient Martian rock that fell to Earth in the form of a meteorite. They found several mineral features characteristic of biological activity, and possible microscopic fossils of primitive, bacteria-like organisms.

Dr. Richard N. Zare, an Academy fellow and professor of chemistry at Stanford University, led the Stanford team that collaborated with scientists at the NASA Johnson Space Center for this discovery. He will explain their findings, including the discovery of a unique pattern of carbon compounds that are the basis of life, unusual mineral phases similar to those of primitive microscopic organisms on Earth, and structures resembling microscopic fossils.

*Tue., Jan. 14 — 7:30 p.m.
Tickets: \$3 each*

The Spring '97 B. Dean Astronomy Lecture Series will continue with Dr. Alan Hale on "Comet Hale-Bopp," Feb. 25; Carolyn Collins Petersen on "Kuiper Objects," Mar. 25; Dr. Eleanor Helin on "Near Earth Objects," April 22; and Dr. Torrance V. Johnson on "The Galilean Moons of Jupiter," May 13. For advance tickets, use the newsletter order form. Tickets may be available at the door on a standby basis. Call (415) 750-7127 for more information.



Dr. Richard Zare will discuss evidence of primitive life on Mars.

PLANETARIUM

1997 Almanac: A Look Ahead

As we look ahead to the major astronomical events expected in 1997, the most anticipated is surely the appearance of comet Hale-Bopp next spring. The brightest comet ever discovered by amateurs, this object has astronomers guessing how bright it may — or may not — get. Find out where to look for it in the sky, along with other events to watch for in the coming year including eclipses, meteor showers, and planetary configurations in this new feature sky show, "1997 Almanac."

The show plays Jan. 10 through March 9 and is shown at 2 p.m. weekdays and 2 p.m. and 4 p.m. on weekends.

January Sky Shows

The Planetarium will be CLOSED Jan. 6–9 for sky show changes.

| Sky Show/Description | Weekday | Weekend |
|--|---------|------------|
| 1997 Almanac 1997 celestial events | 2 p.m. | 2 & 4 p.m. |
| Other Worlds planets beyond our solar system | — | 1 & 3 p.m. |
| Neighbors in Space a family show | — | 11 a.m. |
| StarTalk a tour of the night sky | — | noon |

*Tickets can be purchased one-half hour before the show at the box office once inside the Academy of Sciences (\$2.50 adults/\$1.25 for youth and seniors). Members must redeem their passes for tickets at the box office **prior to the show**. Although shows are not generally recommended for preschoolers, please ask for a child's pass at the box office for children under 6. Call (415) 750-7141 for more information.*

JANUARY 1997

| SUN | MON | TUE | WED | THU | FRI | SAT |
|-----|-----|-----|-----|-----|-----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

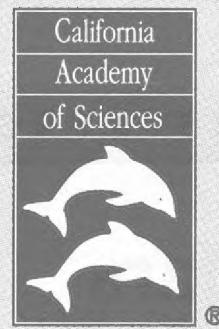
- 1 Friday
"Birds and Beasts of Ancient Latin America" exhibit closes
- 4 Saturday
Music From South America, 1 p.m. (Traditional Arts)
- 5 Sunday
Planetarium closed for sky show changes
"The Dinosaurs of Jurassic Park" exhibition closes
- 8 Wednesday
From Topaz to Tombstones, 2 p.m. & 7:30 p.m. (Members Meeting)
- 10 Friday
Planetarium reopens with "1997 Almanac"
- 11 Saturday
North African Henna Hand Painting, 1 p.m. (Traditional Arts)
- 14 Tuesday
Life on Mars, 7:30 p.m. (Astronomy Lecture)
- 18 Saturday
Native American Dancing, 1 p.m. (Traditional Arts)
- 19 Sunday
Los Palomitos, 1 p.m. (Young Audiences)
- 20 Monday
The Earliest *Australopithecus*, 7 p.m. (Special Lectures)
- 22 Wednesday
The Ancient Arms Race Among Mollusks, 7:30 p.m. (Special Lectures)
- 25 Saturday
Hungarian Folk Arts, 1 p.m. (Traditional Arts)
- 28 Tuesday
Conservation through Compromise, 7:30 p.m. (Wildlife Talks Series)
- 29 Wednesday
Traditional Hungarian Embroidery, 10 a.m. to 4 p.m. (Artist-in-Residence)

FUTURE DATES TO REMEMBER

Feb. 7, Sierra Cross-Country Ski & Winter Ecology Trip (Junior Academy); **Feb. 11**, Wolves, with Rick McIntyre (Members Meeting); **Feb. 15**, "Amber: Window to the Past" exhibit opens; **Feb. 25**, The Compleat Cockroach; **Mar. 12**, Southwestern Pottery (Members Meeting)

VISITOR INFORMATION

Special Exhibitions: "The Dinosaurs of Jurassic Park," through Jan. 5; "Amber: Window to the Past," through April 15; "Folk Toys: The Playful Arts of Japan," through June 1997. • **Feeding Times:** Fish Roundabout, 2 p.m.; Penguins, 11:30 a.m. & 4 p.m. • **Guided Tours:** Free one-hour highlight tours daily. • **Laserium Shows:** Thu.-Sun. evenings. • **Free Day:** First Wed. of each month. • **Hours:** Open every day of the year. Winter hours 10 a.m.-5 p.m. Summer hours (Memorial Day weekend to Labor Day) 9 a.m.-6 p.m. • **Information:** Hotline (415) 750-7145, World Wide Web site <http://www.calacademy.org>



California Academy of Sciences
Golden Gate Park
San Francisco, CA 94118-4599

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TIME-DATED MATERIAL

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| B. DEAN ASTRONOMY LECTURE SERIES | | Quantity | Total | THE WILDLIFE TALKS SERIES | | | |
|---|--|----------------|----------------|---|---|-------------|---------|
| Life on Mars / Jan. 14 | | ____ X \$3 | = _____ | Conservation Through Compromise / Jan. 28 | | | |
| SPECIAL LECTURES | | Qty/Members | Qty/Nonmembers | Total | X \$6 | X \$10 | = _____ |
| The Ancient Arms Race Among Mollusks / Jan. 22 | | ____ X \$6 | ____ X \$10 | = _____ | X \$36 | X \$45 | = _____ |
| The Earliest <i>Australopithecus</i> / Feb. 20 | | ____ X \$6 | ____ X \$10 | = _____ | Saving Sumatra: Land of Elephants, Tigers and Hornbills / April 8 | | |
| Lecture only | | ____ X \$30 | ____ X \$35 | = _____ | ____ x \$6 | ____ x \$10 | = _____ |
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TRADITIONAL ARTS

Music From South America

Quitus (pronounced kee-toos) is a musical ensemble of five brothers, all born and raised in Quito, Ecuador. The traditional music they play has a rich history, extending back before the time of the Incas. It is enshrouded in mystery and legend, evoked by the enchanting sound of their native instruments.



Quitus plays native music from Ecuador

Sat., Jan. 4 — 1 p.m. to 2 p.m.

North African Henna Hand Painting

Painting the skin is one of the oldest and simplest forms of body adornment, for either ritual or purely decorative purposes. Lila Kent demonstrates henna hand painting as she learned from her Tunisian grandmother.

Sat., Jan. 11 — 1 p.m. to 2 p.m.

Native American Dancing

The Eagle Feather Dancers of California are of the White Mountain Apache, Chumash, San Carlos Apache, and Sioux tribes. The group is composed of eight family members and friends headed by George Garcia, who is the lead singer and emcee. The dancers perform a Southwest style of dancing that includes the Eagle Dance, Hoop Dance and other traditional dances.

Sat., Jan. 18 — 1 p.m. to 2 p.m.

Hungarian Folk Arts

Sally and Frank Gati show their 50-minute documentary, *Traditions For Sale*, which is a behind-the-scenes look at some Hungarian folk artists who, because of the new capitalistic climate in Hungary, have been reviving their folk arts to sell to tourists. The Gatis also will bring some typical Hungarian costumes for display.

Sat., Jan. 25 — 1 p.m. to 2 p.m.

Explore cultural traditions from around the world in these one-hour presentations held Saturdays in the auditorium. Free after general admission. Call (415) 750-7165 for more information.

ARTIST-IN-RESIDENCE

Traditional Hungarian Embroidery

Trained at the famous Toth Sandorne Muhimzo Szalon in Budapest, Hungary, Rose Marie Horvath demonstrates and displays traditional Hungarian embroidery. Horvath received her diploma in art and embroidery at the age of 18 and went on to sew and produce hand-work for some of the most exclusive families in Hungary.

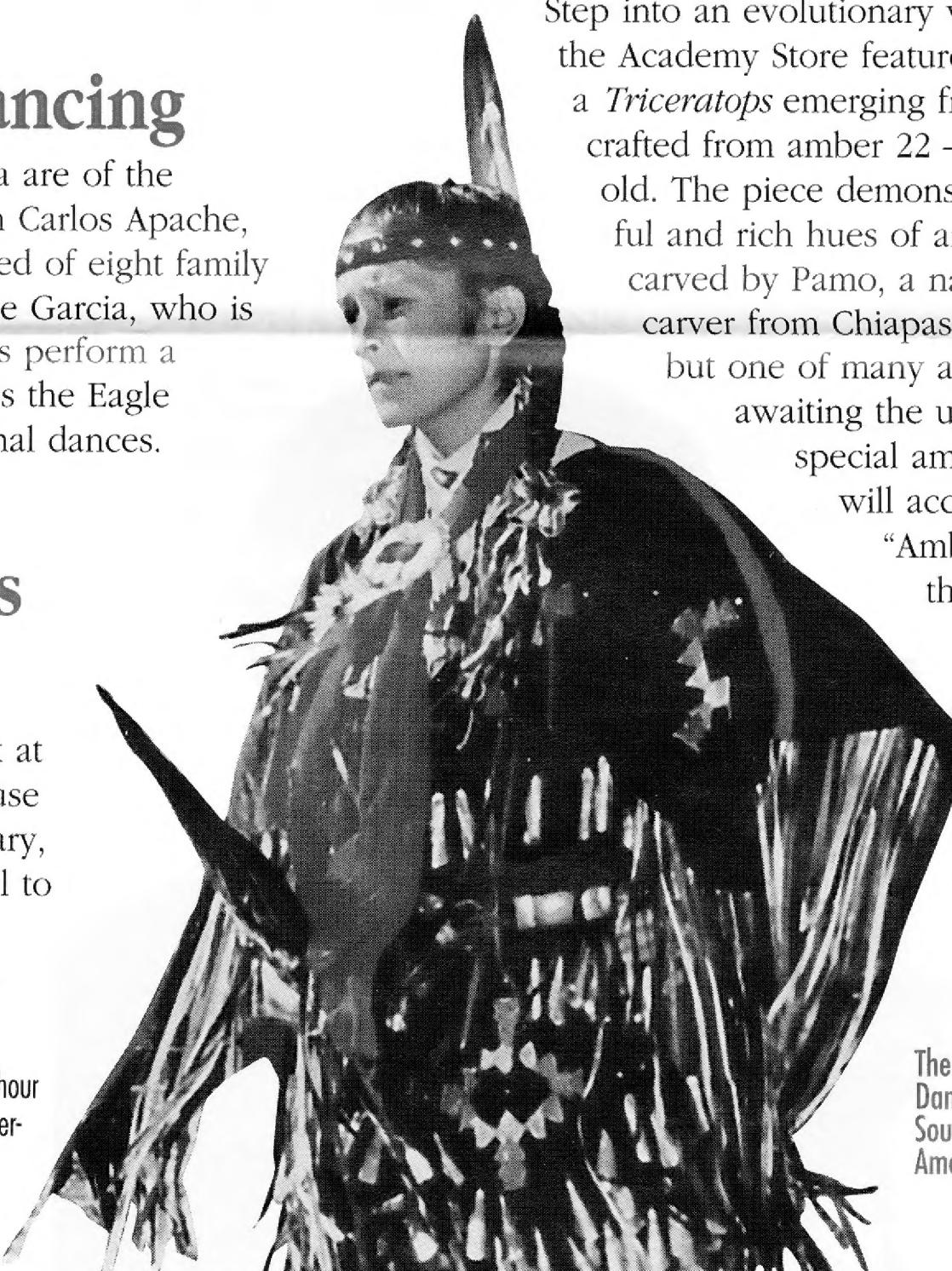
Wed. Jan. 29 — 10 a.m. to 4 p.m.

Enjoy this day-long presentation by craft artists demonstrating and discussing their art form. Visitor participation is encouraged. Free after general admission. Call (415) 750-7165 for more information.

ACADEMY STORE

Amber Treasures

Step into an evolutionary window of time: the Academy Store features a sculpture of a *Triceratops* emerging from his egg, crafted from amber 22 – 26 million years old. The piece demonstrates the beautiful and rich hues of amber carefully carved by Pamo, a native Mexican carver from Chiapas. This carving is but one of many amber treasures awaiting the unveiling of the special amber store that will accompany the "Amber: Window to the Past" exhibit.



The Eagle Feather Dancers perform Southwest Native American dance.

WHOM TO CALL • Academy Info, 750-7145 • Academy Store, 750-7410 • Aquarium, 750-7247 • Biodiversity Center, 750-7361 • Development Office, 750-7216 • Docent Tours, 750-7155 • Education Office, 750-7100 • Group Admissions, 750-7159 • Job Hotline, 750-7333 • Laserium, 750-7138 • Special Lectures, 750-7128 • Library, 750-7102 • Membership Office, 750-7111 • Planetarium, 750-7141 • Planned Giving, 750-7216 • Receptionist, 221-5100 • Security, 750-7000 • Travel, 750-7348 • Volunteer Services, 750-7154 • Weekend Information, 750-7375

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